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## UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte HONG SU LEE, JAE HO HWANG, and WOOK SUNG KIM

Appeal 2008-005907 Application 10/702,551 Technology Center 1700

Decided:1 July 20, 2009

Before BRADLEY R. GARRIS, ADRIENE LEPIANE HANLON, and CATHERINE Q. TIMM, *Administrative Patent Judges*.

HANLON, Administrative Patent Judge.

DECISION ON APPEAL

<sup>&</sup>lt;sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

### A. STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134 from an Examiner's decision rejecting claims 1, 3-5, and 7-29 under 35 U.S.C. § 103(a) as unpatentable over admitted prior art<sup>2</sup> in view of Johnson.<sup>3</sup> We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

The claimed subject matter is directed to a mold apparatus. Claim 1, reproduced below, is illustrative.

A portion of a mold apparatus for manufacturing a light guide, comprising:

a stamper configured to define a surface of a light guide; and

a core material portion fixed to said stamper by a fixing structure, wherein said fixing structure comprises at least one fastening member,

wherein said at least one fastening member extends through said core material portion into said stamper.

# Br. A-1, Claims Appendix.4

# B. ISSUES<sup>5</sup>

 Have the Appellants identified reversible error in the Examiner's conclusion that it would have been obvious to one of ordinary

<sup>&</sup>lt;sup>2</sup> Figures 1-3 and paragraphs [0003]-[0008] of the instant application.

<sup>&</sup>lt;sup>3</sup> US 2,443,826 issued June 22, 1948 to Johnson.

<sup>&</sup>lt;sup>4</sup> Appeal Brief dated October 4, 2007.

<sup>&</sup>lt;sup>5</sup> In the Appeal Brief, the Appellants address claims 1, 4, 5, 8, 13, and 15 separately. However, the Appellants' arguments as to claims 1 and 5 are substantially the same. Br. 9-10, 11-12. The Appellants' arguments as to claims 4 and 8 and claims 13 and 15 are also substantially the same. Br. 10-11, 13. Thus, we confine our discussion to claims 1, 4, and 13 which contain claim limitations representative of the arguments made by the Appellants pursuant to 37 C.F.R. § 41.37(c)(1)(vii).

skill in the art to substitute the attachment means illustrated in Appellants' Figure 3 with conventional nuts and bolts as exemplified by Johnson?

- (2) Have the Appellants identified reversible error in the Examiner's conclusion that the stamper thickness recited in claim 4 would have been obvious to one of ordinary skill in the art?
- (3) Have the Appellants identified reversible error in the Examiner's rejection of claim 13?

### C. FINDINGS OF FACT

## 1. Admitted prior art

Figure 3 in the Appellants' Specification, reproduced below, illustrates a conventional molding apparatus. Spec., [0006].

RELATED ART

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FIG.3

Appellants' Figure 3 depicts a molding apparatus.

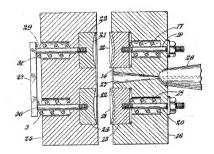
The molding apparatus comprises a stamper 32, a stationary core 34 to which the stamper 32 is attached, a vacuum tube 36 and a vacuum device for attaching the stamper 32 to the stationary core 34 by a vacuum force, a

stamper fixing segment 38 provided at the side portion of the stationary core 34 to determine an attached position of the stamper 32, a stationary molding plate 42, and a movable molding plate 44. Spec., para. [0006].

The stationary core 34 and the stamper 32 are fixed in relation to each other via the vacuum arrangement and the stamper fixing segment 38.

## Johnson

The Figure in Johnson, reproduced below, illustrates a mold apparatus.



The Figure in Johnson depicts a mold apparatus.

## The Examiner found:

Johnson discloses a fastening member (bolt 19/20 and the associated nut) that attaches a die portion (12/13) to a platen member (16), the bolt passing through the platen and into the die portion and the nut securing the bolt to the platen.

Ans. 46; see also Johnson 2:8-16.

<sup>6</sup> Examiner's Answer dated January 28, 2008.

### D. PRINCIPLES OF LAW

During patent examination, the pending claims must be interpreted as broadly as their terms reasonably allow. *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989).

Generally, the words in a claim are given their "ordinary and customary meaning." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

The test for obviousness "is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

A person of ordinary skill is not an automaton but is a person of ordinary creativity. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). One of ordinary skill in the art is presumed to have skills apart from what the prior art references expressly disclose. *In re Sovish*, 769 F.2d 738, 742 (Fed. Cir. 1985).

A factual finding not shown by the Appellants to be erroneous may be accepted as fact. *In re Kunzmann*, 326 F.2d 424, 425 n.3 (CCPA 1964).

## E. ANALYSIS

The Appellants argue that "[i]n the claimed invention, the fastening member is used to fix the core material portion and the stamper in relation to each other." Br. 9. The Appellants argue that Johnson does not teach or suggest this feature because Johnson discloses that the die portions 12 and 13 are slidable within, rather than fixed to, the platen 16. Br. 10.

The Appellants' interpretation of claim 1 is not supported by the claim language. The Examiner correctly explains that claim 1 merely recites that the fixing structure fixes or attaches the core material portion to the stamper

and does not require the core material portion and the stamper to be fixed "in relation to each other." Ans. 5. Clearly, the fastening arrangement disclosed in Johnson satisfies the limitations of claim 1. Johnson Fig., 2:8-16; *see also* Ans. 4.

To the extent the Appellants are relying on something other than the "ordinary and customary meaning" of the words in claim 1 to support their claim interpretation, the Appellants have failed to direct us to such evidence. 7 *Vitronics*. 90 F.3d at 1582.

In any event, setting the claim interpretation issue aside, the Examiner explains:

[T]he real issue is whether one of ordinary skill in the art would have been led to employ bolts and nuts as fixing means in lieu of the vacuum and stamper fixing segments shown in the admitted prior art of instant Figure 3.

## Ans. 5.

There is no dispute that the admitted prior art establishes that it was known to fix or attach a core material portion and a stamper in relation to each other. *See* Spec., para. [0006]. The Examiner merely relied on Johnson to show that a conventional nut and bolt arrangement was also known to secure these types of elements together. Based on this evidence, the Examiner concluded that it would have been obvious to one of ordinary skill in the art to replace the attachment means illustrated in Appellants'

the phrase "fixedly mounted" recited in claim 5.

<sup>&</sup>lt;sup>3</sup> Claim 5 recites that the stamper is "fixedly mounted on a core material portion using at least one fastening member." On appeal, the Appellants' arguments do not distinguish the phrase "fixed to" recited in claim 1 from

<sup>&</sup>lt;sup>8</sup> The Examiner found, and the Appellants do not dispute, that the platen is equivalent to the claimed core material portion and the die portion is equivalent to the claimed stamper. Ans. 4; *see also* Br. 9-10.

Figure 3 with conventional nuts and bolts. Ans. 4, 5-6. On appeal, the Appellants have failed to direct us to any error in the Examiner's findings of fact or conclusion of obviousness.

#### Issue (2)

Claim 4 recites that "said stamper is between 6 and 12 mm thick."

The Examiner submits that it would have been within the skill of the ordinary artisan to adjust the thickness of the stamper based on strength, heat transfer, and structural stability considerations. Ans. 4. 6.

The Appellants argue that one of ordinary skill in the art "would be motivated to refrain from increasing the thickness of the stamper" in view of the teachings on page 4 of the Specification. Br. 10.

The Appellants' argument is not persuasive of reversible error. The Specification states that it is difficult to make "a large plating thickness" according to the electroplating method. Spec. 4:25-29. However, the Specification does not define "a large plating thickness." Furthermore, the Specification does not discuss the nature of the difficulty or identify difficulties associated with any other manufacturing method.

In fact, the Appellants appear to use the same electroplating method discussed on page 4 of the Specification to manufacture a stamper having the claimed thickness. *Compare* Spec. 4:20-25 (a nickel stamper is made using a brass plate as a master, then electroplating nickel on the surface of the brass plate) *with* Spec. 12:21-24 (the stamper is manufactured by nickel electroplating using a brass plate master).

For these reasons, the evidence relied on by the Appellants is not sufficient to establish reversible error.

## 3. Issue (3)

The Appellants argue that the Appellants' Figure 3 shows the core 34 and the stamper 32 held within the stationary molding plate 42 rather than the movable molding plate as recited in claim 13. Br. 11.

Regardless of the express disclosure of the admitted prior art, the Examiner concludes that "it would be purely obvious as to which side of the molding apparatus the stamper is situated in." Ans. 6. The Appellants have failed to direct us to any evidence to the contrary. *See In re Gazda*, 219 F.2d 449, 452 (CCPA 1955) (mere reversal of parts is an obvious expedient).

## F. CONCLUSIONS OF LAW

The Appellants have not identified reversible error in the Examiner's conclusion that it would have been obvious to one of ordinary skill in the art to substitute the attachment means illustrated in Appellants' Figure 3 with conventional nuts and bolts as exemplified by Johnson.

The Appellants have not identified reversible error in the Examiner's conclusion that the stamper thickness recited in claim 4 would have been obvious to one of ordinary skill in the art.

The Appellants have not identified reversible error in the Examiner's rejection of claim 13.

### G. DECISION

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

## AFFIRMED

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Appeal 2008-005907 Application 10/702,551

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